



**BRIGHT LED ELECTRONICS CORP.**

SINCE 1981

# **DATA SHEET**

● DEVICE NUMBER : BL-R4530A-T

佰鴻工業股份有限公司

BRIGHT LED ELECTRONICS CORP.

台北縣板橋市和平路 19 號 3 樓

3F., No. 19, Ho Ping Road, Pan Chiao City,

Taipei, Taiwan, R.O.C.

Tel: 886-2-29591090

Fax: 886-2-29547006/29558809

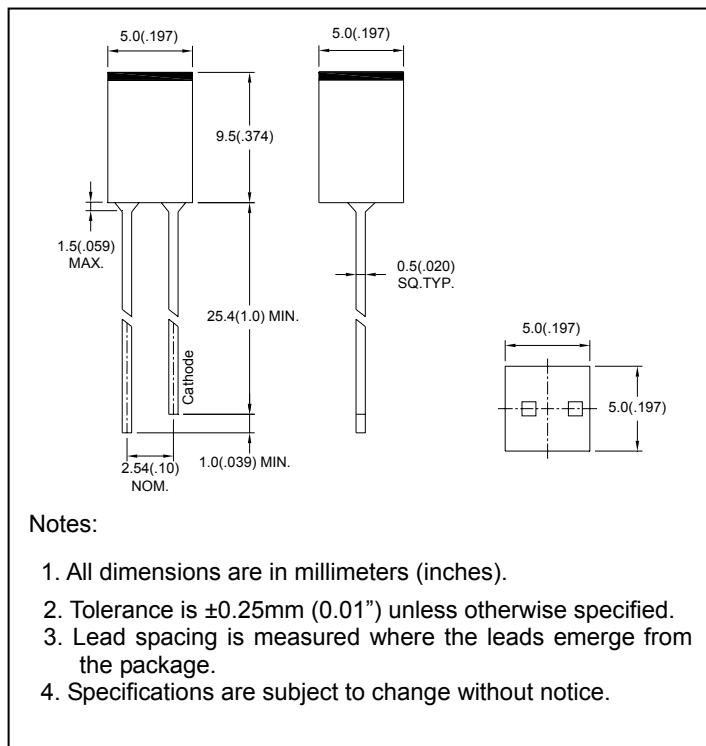
[www.brtled.com](http://www.brtled.com)

APPROVED	DRAWER
毛曉峰	謝 梅

## ● Features:

1. Chip material: GaAsP/Gap
2. Emitted color :Hi-Eff Red
3. Lens Appearance : Red Diffused
4. Low power consumption.
5. Most suitable for use like level indicator.
6. Excellent uniformity of light emittance.
7. Long life solid state reliability.
8. Compatible.
9. This product don't contained restriction substance, compliance ROHS standard.

## ● Package Dimensions:



## ● Applications:

1. TV set
2. Monitor
3. Telephone
4. Computer
5. Circuit board

## ● Absolute maximum ratings( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	80	mW
Forward Current	I <sub>F</sub>	30	mA
Peak Forward Current* <sup>1</sup>	I <sub>FP</sub>	150	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	T <sub>opr</sub>	-40°C~80°C	
Storage Temperature	T <sub>stg</sub>	-40°C~85°C	
Soldering Temperature	T <sub>sol</sub>	260°C (for 5 seconds)	

\*<sup>1</sup>Condition for I<sub>FP</sub> is pulse of 1/10 duty and 0.1msec width.

## ● Electrical and optical characteristics(Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	-	2.0	2.6	V
Luminous Intensity	I <sub>V</sub>	I <sub>F</sub> =20mA	-	9	-	mcd
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	100	μA
Peak Wave Length	λ <sub>p</sub>	I <sub>F</sub> =20mA	-	640	-	nm
Dominant Wave Length	λ <sub>d</sub>	I <sub>F</sub> =20mA	617	-	638	nm
Spectral Line Half-width	Δλ	I <sub>F</sub> =20mA	-	40	-	nm
Viewing Angle	2θ <sub>1/2</sub>	I <sub>F</sub> =20mA	-	150	-	deg

## ● Typical electro-optical characteristics curves

Fig.1 Relative intensity vs. Wavelength

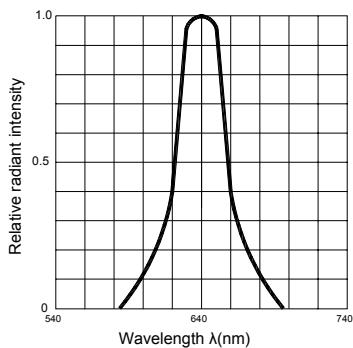


Fig.2 Forward current derating curve vs. Ambient temperature

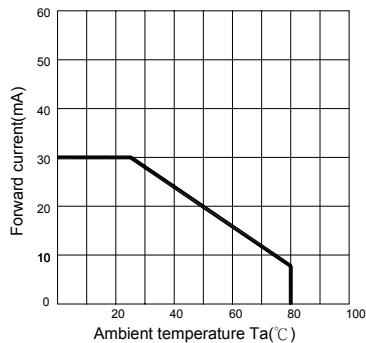


Fig.3 Forward current vs. Forward voltage

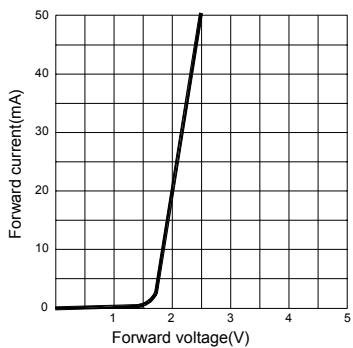


Fig.4 Relative luminous intensity vs. Ambient temperature

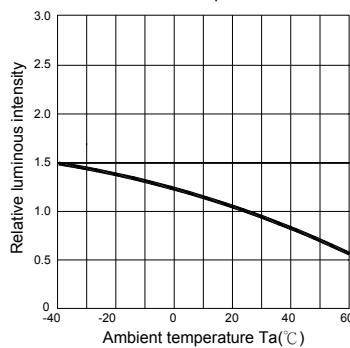


Fig.5 Relative luminous intensity vs. Forward current

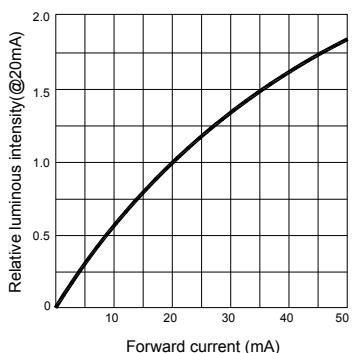


Fig.6 Radiation diagram

